

User's Manual (Monitoring Tool)

Introduction:

The software can directly see the data of the different level of radiation in the test chamber charm. It takes into account the configuration change automatically and calculating calibration factors for these changes.

Archive interface:

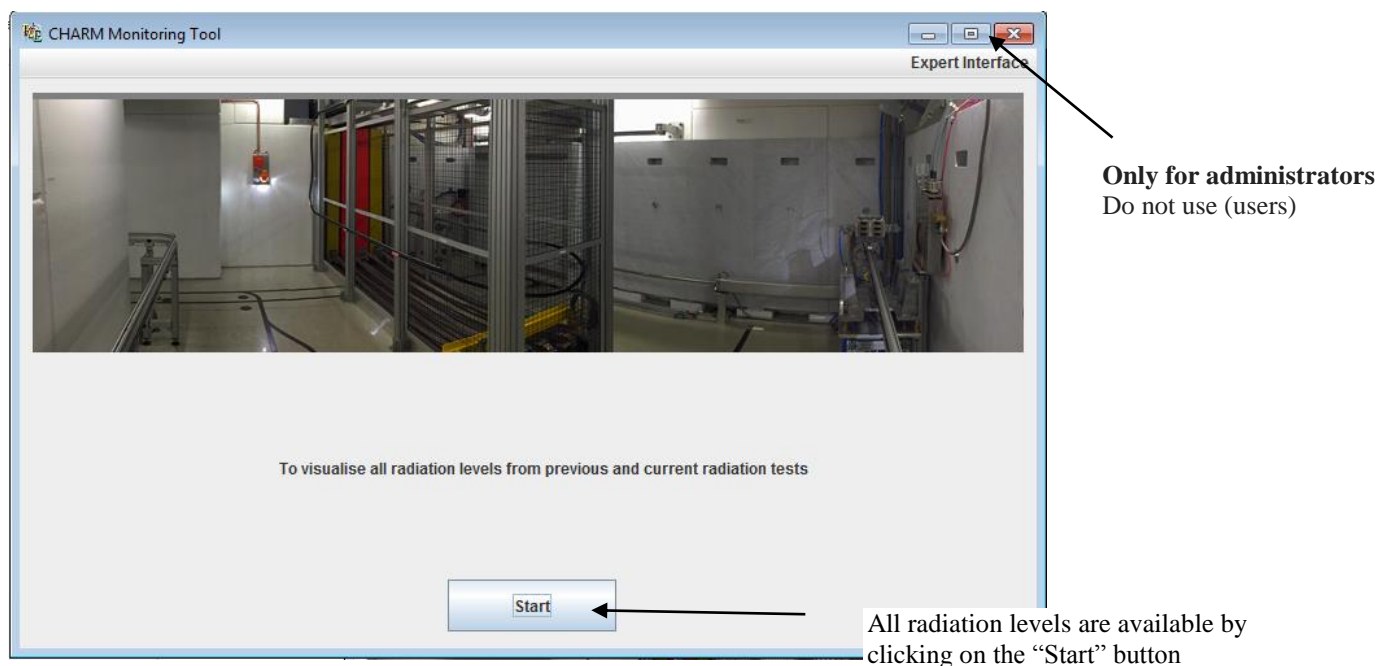
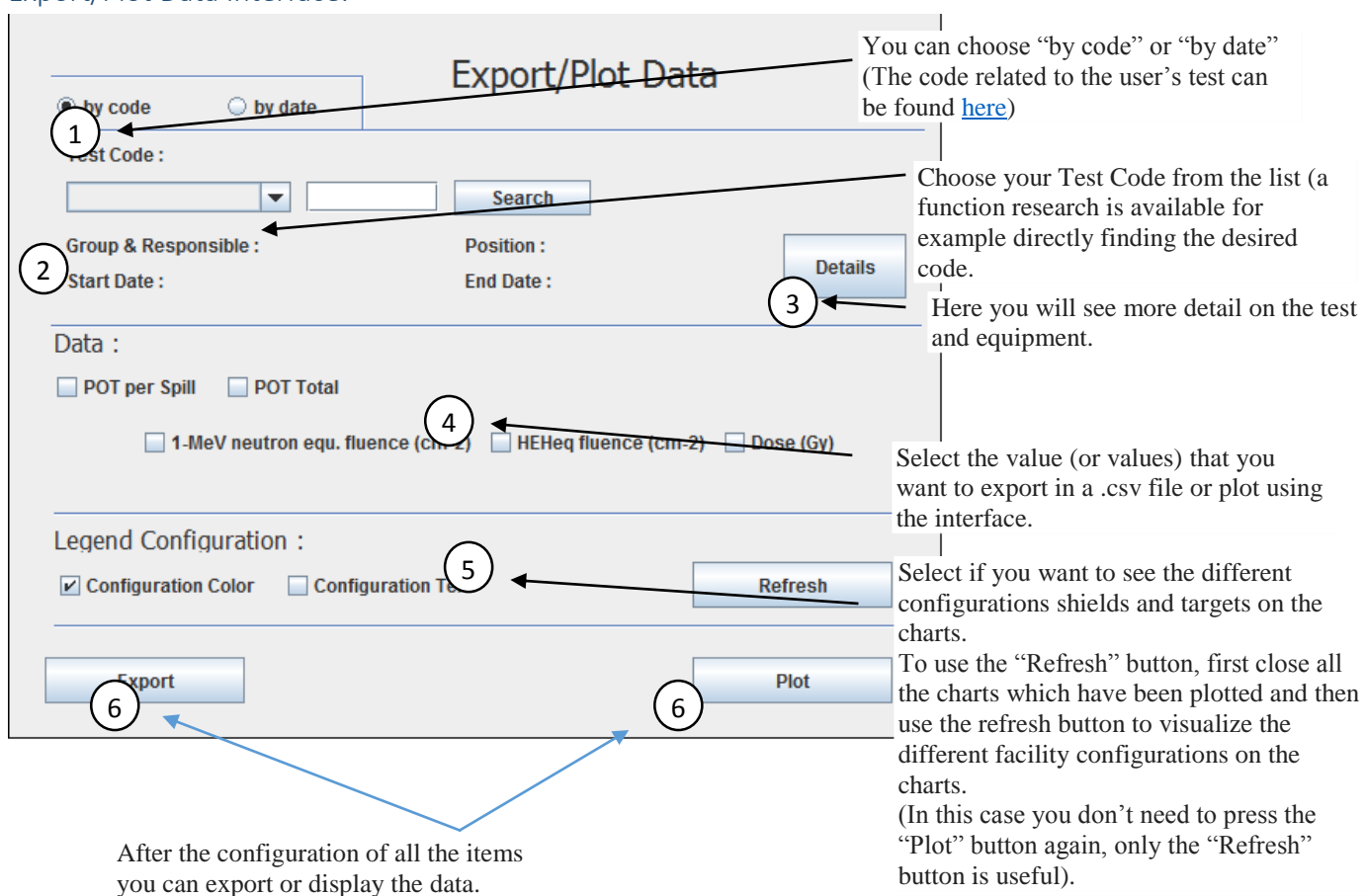


Figure 1

Export/Plot Data Interface:



Plots interface:

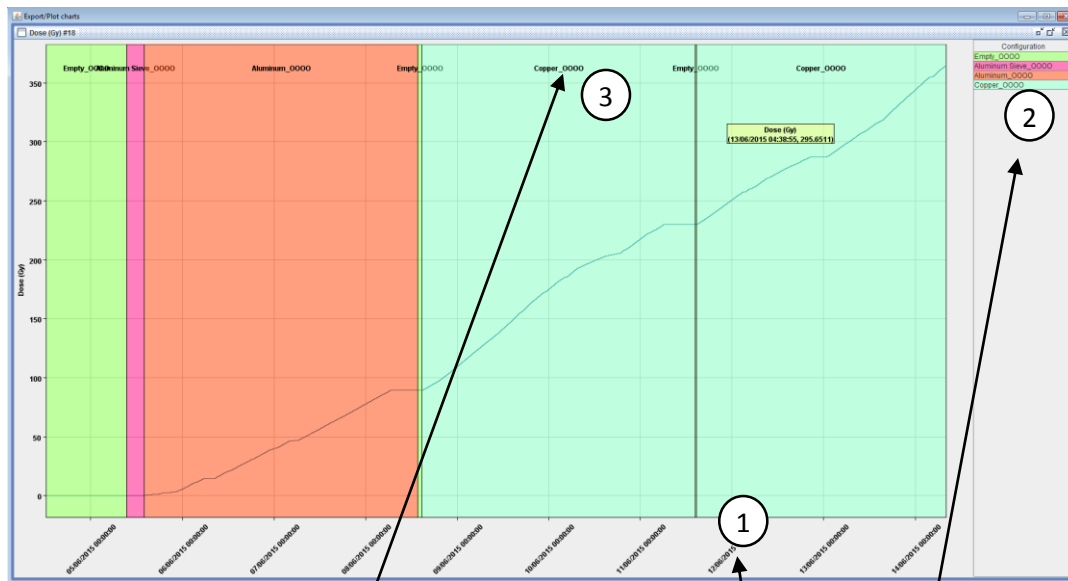


Figure 3

Convention for the different facilities configuration:

TargetType_shields1/2/3/4

For the shields:

- O is corresponding to parking position
- C is corresponding to concrete shielding IN target chamber
- I is corresponding to iron shielding IN target chamber

Color code of the facility configuration (1) related to the legend (2)

Example in Figure 3:

- Copper_O000 (Copper Target and all shielding in parking position)

Example in Figure 4:

- Copper_CIOO (Copper target; shield1(Concrete): IN; shield2(Iron): IN; shields 3 and 4 in parking position)

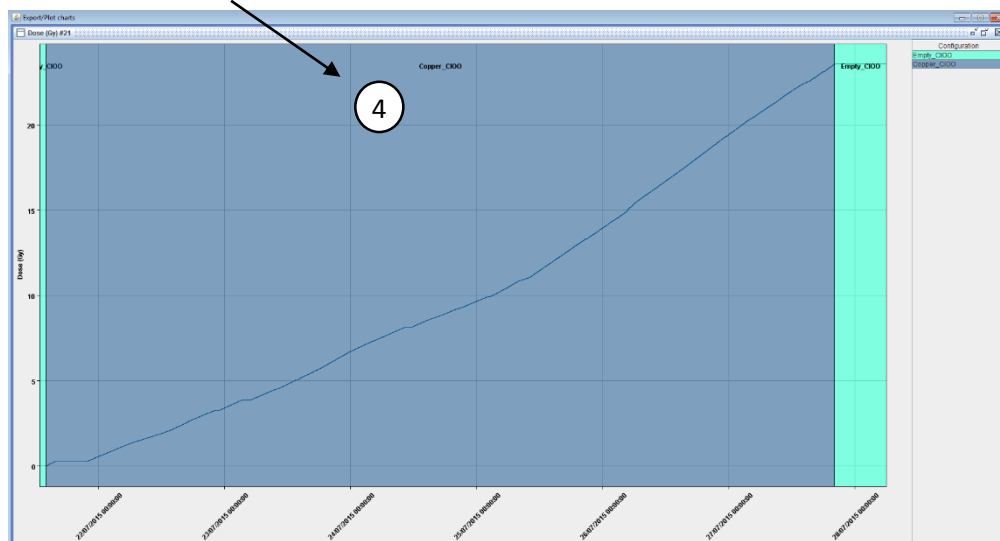


Figure 4

Export/Plot Data

☐ by code
 ☒ by date

Start date : (Local) 01/08/2015 13h09 5
 End date : (Local) 15/08/2015 13h09

Supports : R1-U0 6
☐ Montrac

Data :

☒ POT per Spill
 ☒ POT Total

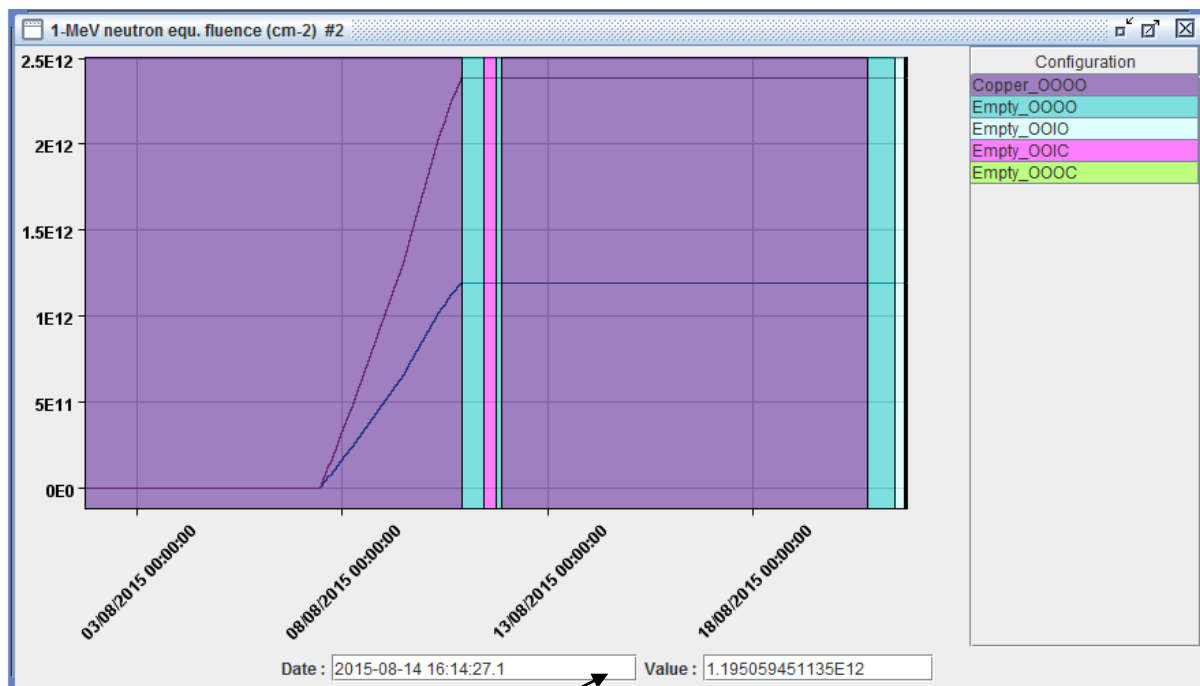
☒ Dose (Gy)
 ☒ 1-MeV neutron equ. fluence (cm-2)
 ☒ HEHeq fluence (cm-2)

Legend Configuration :

☒ Configuration Color
 ☐ Configuration Text

Selecting by date include a new menu, in this one was the selection of a start date and an end date.

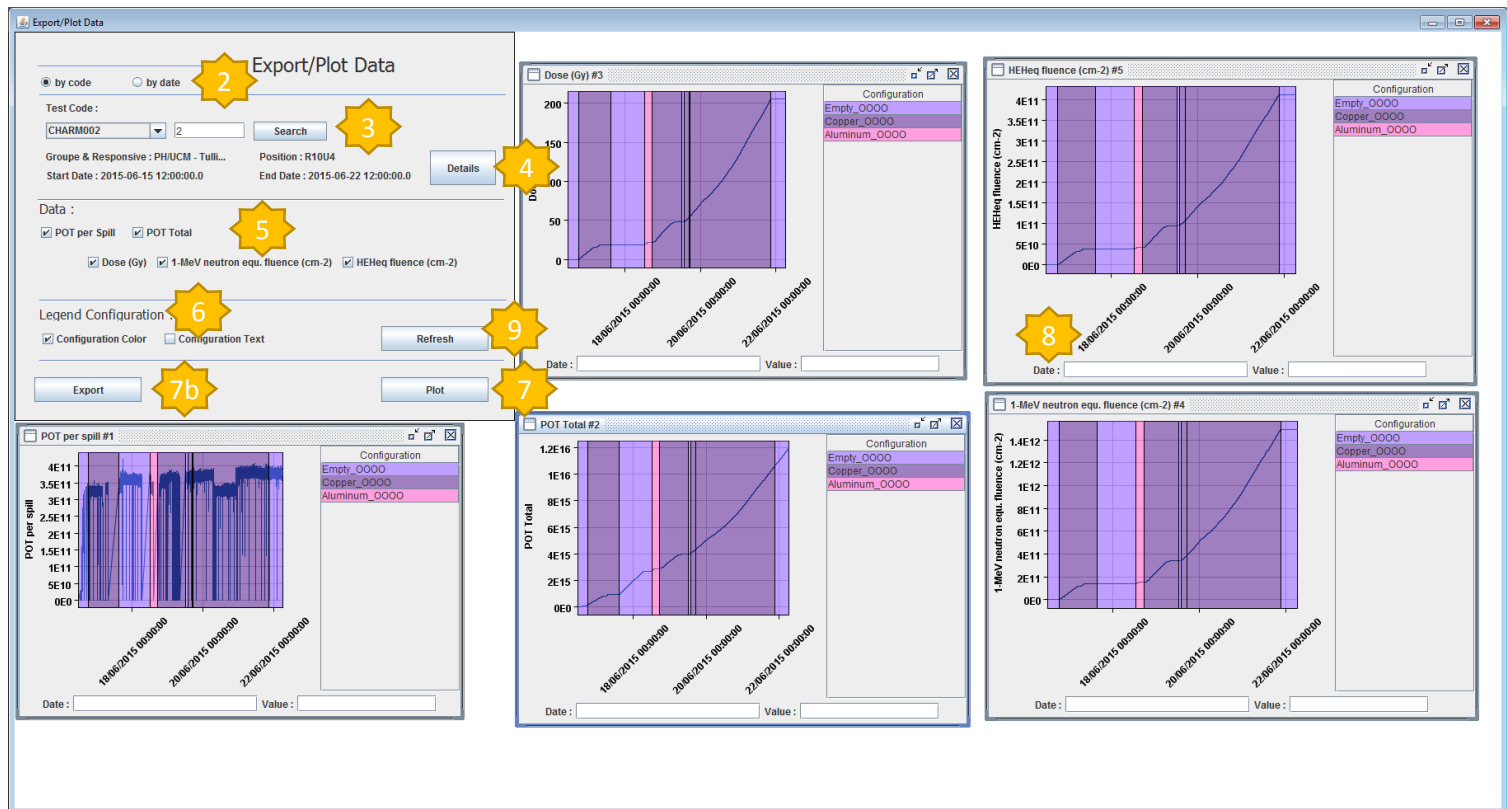
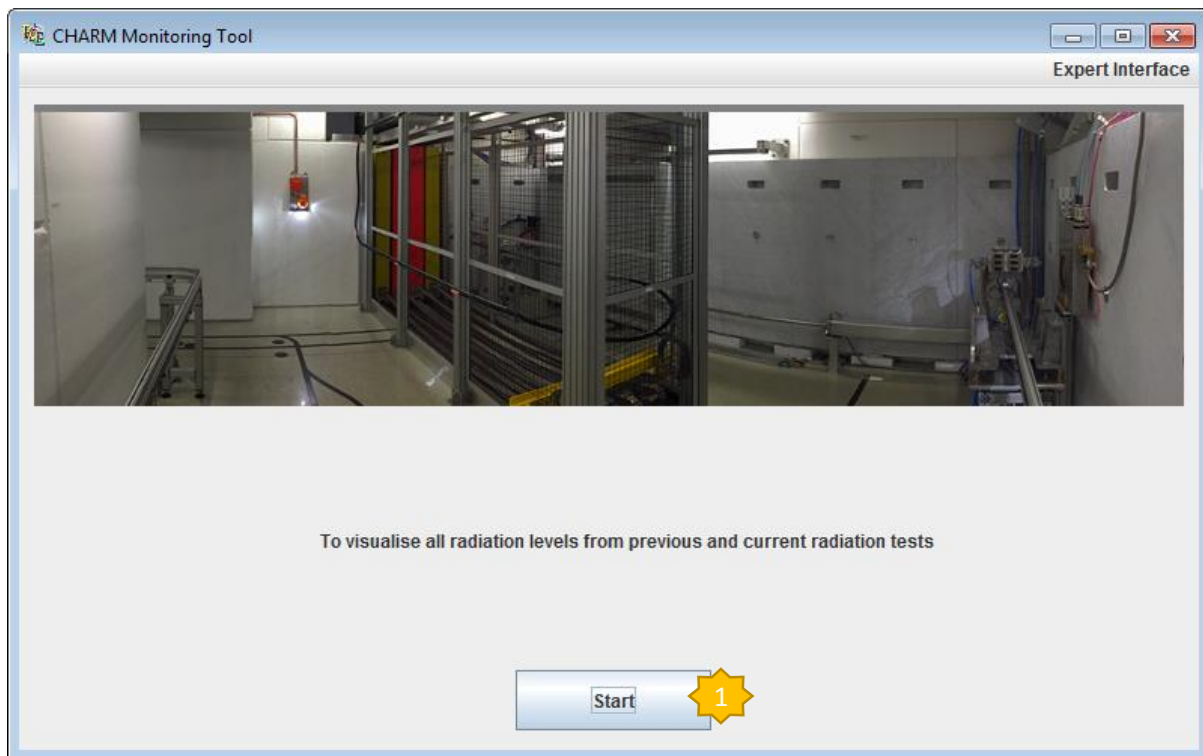
It will manually select what is the position we want the results. For Montrac it just enough to check the Montrac.



When you select a data she appears below the graph for readability

When you select Montrac selected or that the test is in the Montrac, the graphics will show 2 data. Max calibration and calibration min.

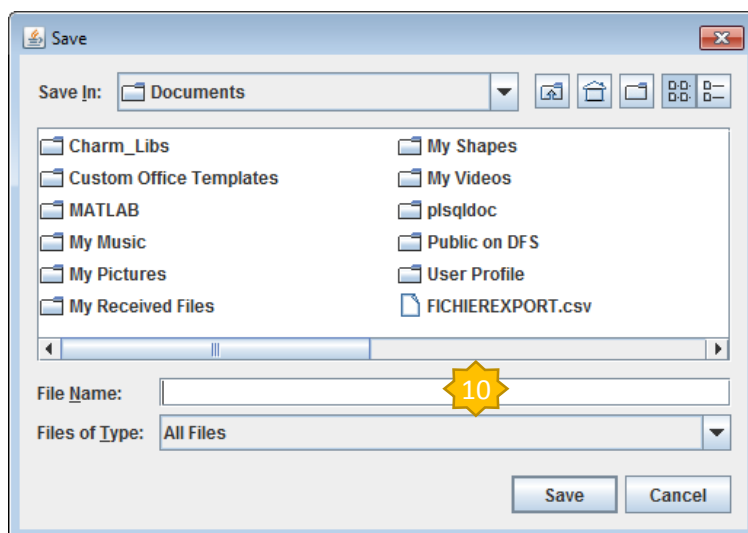
To generate a graph:



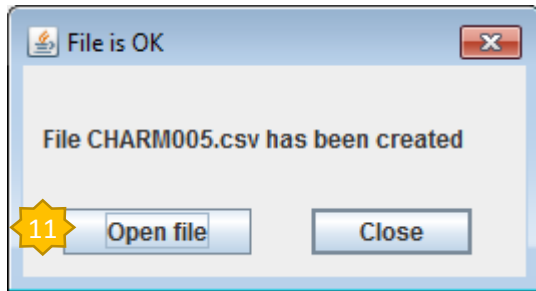
- 1) To enter the archives it simply press the start button .
- 2) there are 2 methods to display graphics or for exporting data , first with a TestCode which was registered beforehand with a date of beginning and end , the second method is to put the dates you want directly choose the location where the equipment is located .
- 3) TestCode your search via the search function and select it in the list.
- 4) TestCode your search using the search function and select it in the list , a detailed brief will appear below this one. You can see more detail in a new window by clicking the detail button.
- 5) select the different datas you want (choose 1 minimum)
- 6) In the menu 'legend configuration' is useful to enable or disable of the elements on the charts. It is possible to display a color for each calibration charts on a legend is displayed on the right side of the graph , and the 2nd choice is to display the text directly on the graph (medium readable when there are a lot of configuration changes)
- 7) 7b) Finally it is possible to export data or plot data.
- 8) graphics are displayed in the window it is possible to move them or display them in fullscreen.
- 9) after having a first time generate the data it is possible without having to waste time to retrieve the values in the given base to give , or deliver to add legends (6).

Export :

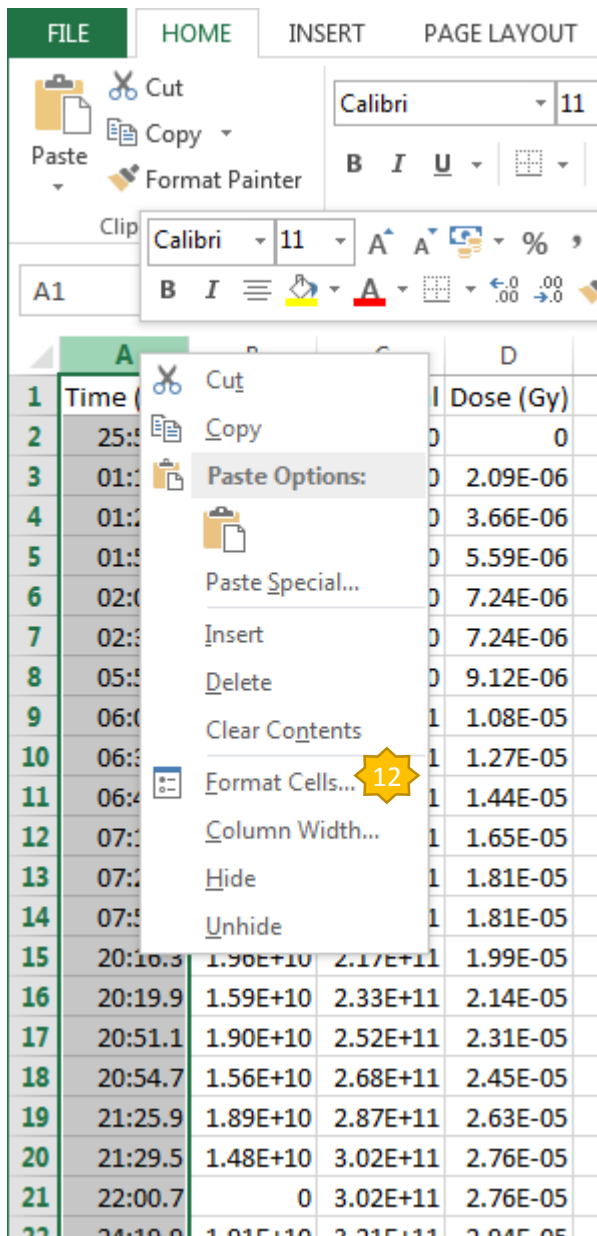
It is possible to export the data to a csv file, simply follow exactly the same approach as for the graphics but at the point (7) using the button (7b) for export.



10) A window opens with the different files present on the computer, just choose a name to select the folder where you want to save it and press "Save".



11) After a few seconds of loading time to write the file opens a small window to open the file directly or close this window and return to the choice of data

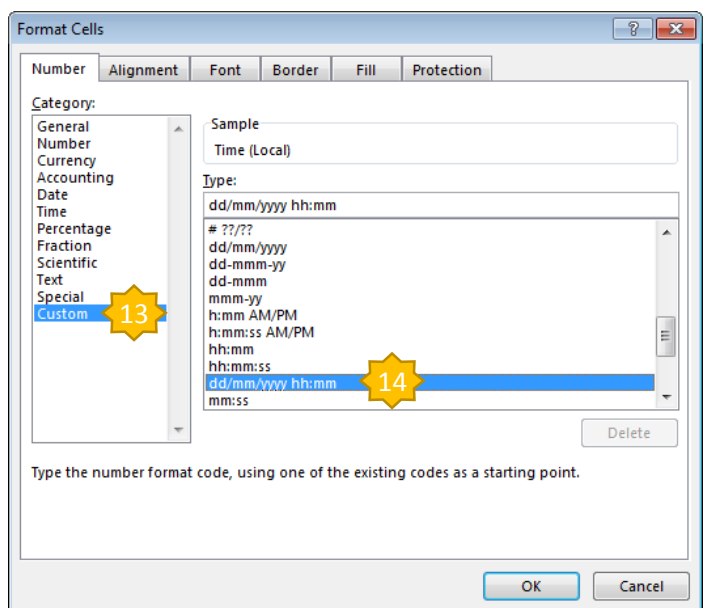


The generated file can be read in Excel or "open office" or even via a text editor .

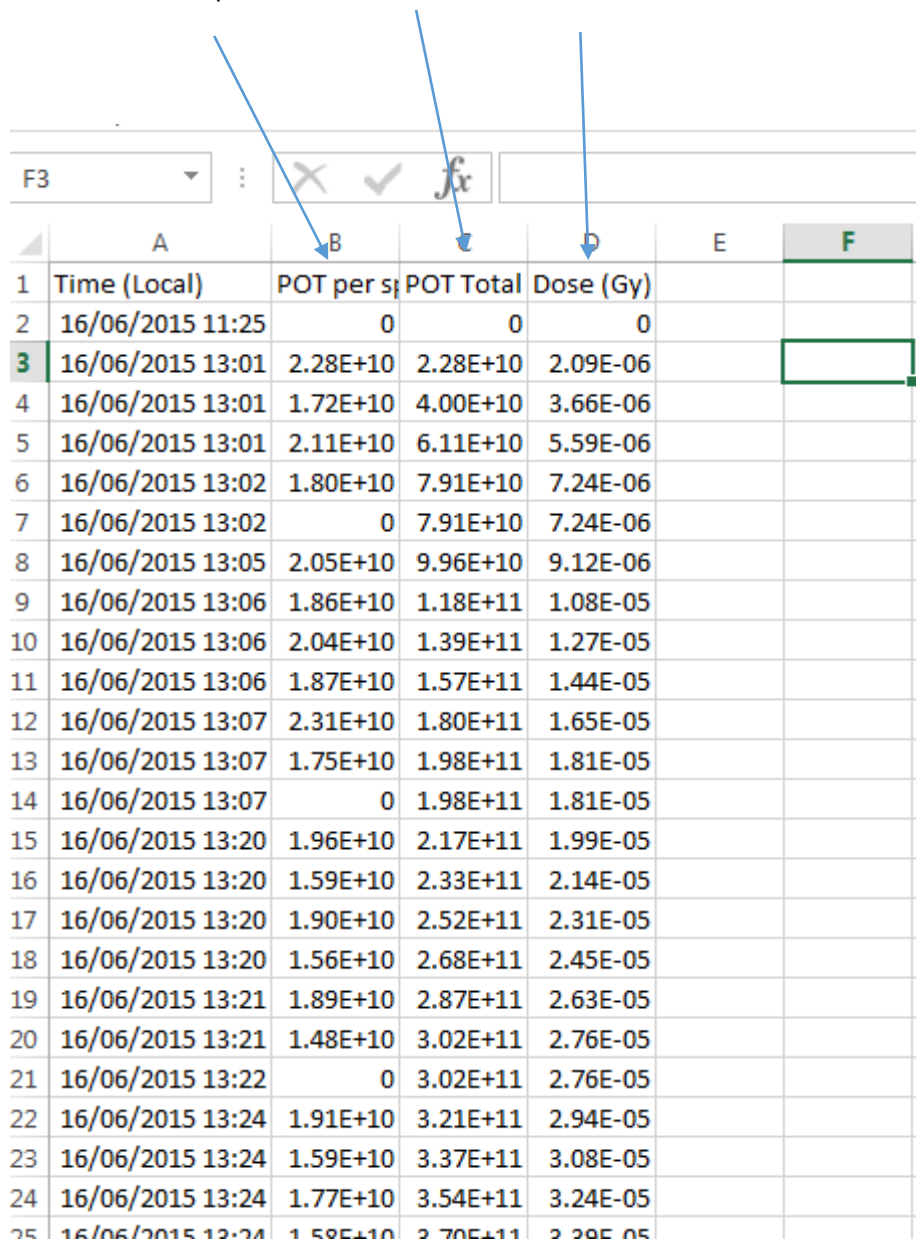
To excel the limit of the number of deals is 1048576 lines (which corresponds to nearly 20 weeks may test)

12) When Excel opens the time display is not accurate we must change the cell format to get a clearer result. Right-click on the time column will open a menu and select the item "Format cells ..."

It will suffice just select the date type that wants to have in the custom category (13) for example a full day (14) dd / mm / yyyy hh: mm.



Each column corresponds to a deal which was select before



	A	B	C	D	E	F
1	Time (Local)	POT per sp	POT Total	Dose (Gy)		
2	16/06/2015 11:25	0	0	0		
3	16/06/2015 13:01	2.28E+10	2.28E+10	2.09E-06		
4	16/06/2015 13:01	1.72E+10	4.00E+10	3.66E-06		
5	16/06/2015 13:01	2.11E+10	6.11E+10	5.59E-06		
6	16/06/2015 13:02	1.80E+10	7.91E+10	7.24E-06		
7	16/06/2015 13:02	0	7.91E+10	7.24E-06		
8	16/06/2015 13:05	2.05E+10	9.96E+10	9.12E-06		
9	16/06/2015 13:06	1.86E+10	1.18E+11	1.08E-05		
10	16/06/2015 13:06	2.04E+10	1.39E+11	1.27E-05		
11	16/06/2015 13:06	1.87E+10	1.57E+11	1.44E-05		
12	16/06/2015 13:07	2.31E+10	1.80E+11	1.65E-05		
13	16/06/2015 13:07	1.75E+10	1.98E+11	1.81E-05		
14	16/06/2015 13:07	0	1.98E+11	1.81E-05		
15	16/06/2015 13:20	1.96E+10	2.17E+11	1.99E-05		
16	16/06/2015 13:20	1.59E+10	2.33E+11	2.14E-05		
17	16/06/2015 13:20	1.90E+10	2.52E+11	2.31E-05		
18	16/06/2015 13:20	1.56E+10	2.68E+11	2.45E-05		
19	16/06/2015 13:21	1.89E+10	2.87E+11	2.63E-05		
20	16/06/2015 13:21	1.48E+10	3.02E+11	2.76E-05		
21	16/06/2015 13:22	0	3.02E+11	2.76E-05		
22	16/06/2015 13:24	1.91E+10	3.21E+11	2.94E-05		
23	16/06/2015 13:24	1.59E+10	3.37E+11	3.08E-05		
24	16/06/2015 13:24	1.77E+10	3.54E+11	3.24E-05		
25	16/06/2015 13:24	1.59E+10	3.70E+11	3.39E-05		

Error messages and solution:

When you see this message Ci below it is that connection has the base of gives was lost (possible loss of internet connection) to solve the problem want to close and reopen the program.



The message below indicates that the configuration was not yet creates, want to contact the person in charge of CHARM so that it growth creates the configuration.



The message below indicates that the database was too uses with the receipts to solve the problem to close and reopen the program.

